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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/536,751	05/27/2005	Jean-Luc Deville	CU-4509	2448

26530 7590 09/18/2006

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CHICAGO, IL 60604

EXAMINER

HUYNH, PHUONG

ART UNIT	PAPER NUMBER
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2857

DATE MAILED: 09/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/536,751

Applicant(s)

DEVILLE, JEAN-LUC

Examiner

Phuong Huynh

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 May 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date May 27, 2005.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. Figure 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 101*

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. A process is statutory if it requires physical acts to be performed outside the computer independent of and following the steps to be performed by a programmed computer, where those acts involve the manipulation of tangible physical objects and result in the object having a different physical attribute or structure (see MPEP 2106). A claim is limited to a practical application when the method, as claimed, produces a concrete, tangible and useful result; i.e., the method recites a step or act of producing

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something that is concrete, tangible and useful. Referring to the "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" in determining whether the claim is for a "practical application," the focus is not on whether the steps taken to achieve a particular result are useful, tangible and concrete, but rather that the final result achieved by the claimed invention is "useful, tangible and concrete."

Regarding claim 1, the method as claimed merely recites steps or abstract idea such as "obtaining information concerning torque exerted on the steering wheel by measuring [two angles of two sensors located at the steering wheel and the lower column part," "comparing of [the two measured angles]," "computing the load on the steering wheel," "computing variation of the load on the steering wheel and PID filtering of the [two measured angles]" "to obtain torque information for computation of the set point of the assistance torque to be applied to the steering column by the assistance motor." The obtained "torque information" is not recited as being communicated to a user, displayed, used by the user, or stored in any tangible form for later use or access.

There is no physical transformation, nor any useful concrete, and tangible result produced by the claimed invention.

Claims 2-11 depends from rejected claim 1 and therefore is rejected.

***Allowable Subject Matter***

3. Claims 1-11 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. §101, set forth in this Office action.

Noto et al. (hereinafter "Noto") (US Patent No. 4,753,975) discloses an electro-motive power steering system including a torque sensor for detecting a steering force exerted to a steering wheel, a motor controlled in accordance with the output of the torque sensor, a steering angle sensor for detecting a steering angle, acceleration/deceleration deciding circuit for deciding based on the outputs of the torque sensor, and the steering angle sensor whether the steering of the steering wheel is accelerated or decelerated, and a function generator for generating a function of either one of acceleration or deceleration in accordance with the result of the decision by the acceleration/deceleration deciding circuit, wherein a steering assisting force corresponding to the acceleration or deceleration of the steering of the steering wheel is applied to the steering wheel [see Noto: Abstract; col. 3, line 66-col. 4, line18; col. 4, lines 31-35, and lines 59-67].

Chen et al. (hereinafter "Chen") (US Patent No. 6,876,911) discloses a control unit for an electric power steering apparatus can obtain continuous, stable and comfortable feeling of steering, for improved steering, based on a provision of a continuous hysteresis characteristic using a low-cost structure on software. For this purpose, the control unit for an electric power steering apparatus controls a motor for giving steering assist force to a steering mechanism based on a current control value calculated from a steering assist command value calculated based on the steering torque generated in the steering shaft, and

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a current value of the motor. The control unit includes an assist calculating unit that differentiates a signal of the steering torque, adds the *differentiated value* to the steering assist command value, and continuously changes the *differential gain* according to the steering torque and the size of the vehicle speed [see Chen: Abstract; col. 5, lines 1-16; and col.5, line 46-col. 6, line 5]

Regarding claim 1, the combination as claimed wherein “comparing the first and second angles measured, taking into account rigidity of the steering column between locations at which the first and second angles are measured,” or “computing the load on the steering wheel by comparison of positions of the first and second sensors, and computing variation of the load on the steering with respect to speeds of rotation of the first and second sensors, PID filtering of the first and second angles measured to obtain torque information for computation of the set point of the assistance torque to be applied to the steering column by the assistance motor.”

Claims 2-11 depend from claim 1 and therefore would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. §101, set forth in this Office action.

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**Conclusion**

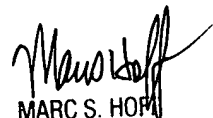
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Huynh whose telephone number is 571-272-2718. The examiner can normally be reached on M-F: 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 571-272-2216. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Phuong Huynh  
Examiner  
Art Unit 2857

PH  
09/12/2006

  
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